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ABSTRACT

Suggestions for the development of a comprehensive state plan for environmental education in Illinois are offered in this proposal. They deal with the: (1) rationale for such a plan, (2) identification of environmentally related problems, (3) goals of environmental education, and (4) development of a strategy to achieve these goals. Problems are identified in the areas of people, culture, resources, and the lack of significant action in bringing about environmental quality. The scope and goals of environmental education are defined, and the need for responsibility and accountability for the achievement of the goals is expressed. Exemplary components of a master plan having a major responsibility for environmental education are identified and include: state governments, school districts, colleges and universities, professional associations, businesses and industries, local governments, federal and regional governments, citizen organizations, individual citizens, independent education organizations, and mass media. Each component is described at length, outlining its objectives, constraints, and strategies. Final recommendations emphasize the need for establishing a trans-disciplinary task force to develop a master plan for environmental education for Illinois. (BL)

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A PROPOSAL

FOR THE DEVELOPMENT OF A MASTER PLAN FOR ENVIRONMENTAL EDUCATION

FOR THE STATE OF ILLINOIS

RECOMMENDATIONS OF A STATEWIDE INVITATIONAL CONFERENCE

ON ENVIRONMENTAL EDUCATION

LORADO TAFT FIELD CAMPUS, NORTHERN ILLINOIS UNIVERSITY

OREGON, ILLINOIS

JANUARY, 1971

SE 012 130

ED052989

Honorable Richard B. Ogilvie, Governor
State of Illinois
State Capitol
Springfield, Illinois

SUBJECT: Master Plan for Environmental Education

Dear Governor Ogilvie:

With much pleasure the participants of an Environmental Education Conference held in January, 1971, at Northern Illinois University's Lorado Taft Field Campus, transmit herewith this Proposal for the Development of a Master Plan for Environmental Education for the State of Illinois.

The principal recommendation of this conference is that you be asked as Governor of the State of Illinois, to:

> ESTABLISH A TRANS-DISCIPLINARY TASK FORCE THAT IS REPRESENTATIVE OF ALL APPROPRIATE STATE AGENCIES, PRIVATE ORGANIZATIONS, AND INTEREST GROUPS TO DEVELOP A MASTER PLAN FOR ENVIRONMENTAL EDUCATION FOR ILLINOIS.

It is further recommended (1) that the Task Force be established as soon as possible, (2) that it be provided with sufficient monies to properly and expeditiously develop a detailed and comprehensive plan, and (3) it work on a continuing basis through a permanent staff to develop, implement, and evaluate the plan.

We sincerely hope that you will give careful consideration to this proposal and that we may soon have a favorable response from you.

The citizens of Illinois are deeply concerned about receiving environmental information in such a way that they and their children will become environmentally literate and active citizens who are knowledgeable about ecological processes and motivated to support needed legislation and action.

The conference participants stand ready to assist your office in serving the environmental education needs of the State.

Respectfully submitted,

Illinois Conference on Environmental Education

Malcolm D. Swan, Chairman

ENVIRONMENTAL EDUCATION PLANNING CONFERENCE

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January 19 - 21, 1971

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INTRODUCTION

Ecological crises are imminent. Immediate concerted programs to educate all population segments relative to these crises are essential if man is to survive. Although some programs are being conducted in Illinois with this as their purpose they have been sporatic, fragmented and of insufficient magnitude to cope with the growing environmental problems. Hence, it is mandatory that the state leadership give highest priority to the development of an action plan for environmental education for Illinois. This plan should marshal the resources of all sectors -- private, public, and government -- in a coordinated, massive effort to inform all Illinois citizens of the causes, implications, and ameliorations of these ecological crises.

Objectives of a State Plan

A comprehensive State plan for environmental education in Illinois should (1) identify existing major resources and efforts as well as constraints and needs, (2) define and delineate the role of each sector in Illinois, and (3) provide strategies to encourage and enable each of these sectors to perform its role. Implementation should lead to (1) support for individual and organizational acts and actions designed to improve environmental quality, (2) rejection of individual and organizational activity that tends to be deleterious to the environment, and (3) retar-

dation or reversal of trends and life styles that create environmental problems and shift ecological balances unfavorably.

State Plan Proposal Conference

A state-wide environmental education conference was held at Northern Illinois University's Lorado Taft Field Campus, January 19-21, 1971, to bring together individuals who were both knowledgeable about environmental and ecological education and concerned about (1) the dangerous ecological crises to which Illinois citizens are contributors, and (2) the lack of effective actions to meet these crises. These individuals, representing a wide range of agencies, organizations and groups in Illinois, assembled at this conference to express their concerns and to explore possible strategies for alleviating them. Individually, and in concert, they set forth to:

1. Initiate state-wide cooperative action toward environmental education goals by:

    a. exploring means of creating citizen and governmental awareness and understanding of the need for state-coordinated action,

    b. preliminary identification of the major performance objectives that various representative government and citizen groups could achieve in such coordinated action,

    c. preliminary study of the constraints to the achievement of these objectives,

    d. recommending to the state powers that responsibilities be assigned and monies appropriated to insure a coordinated state-wide action (e.g., development of a state plan).

2. To provide the opportunity for individuals from representative agencies in the state to begin discourse on the development of state coordinated action.

3. To provide the opportunity for individuals representing regional and federal efforts in environmental education to share in deriving a state proposal.

4. To place under review the environmental education efforts in the state until such time that an official state plan is formulated and implemented.

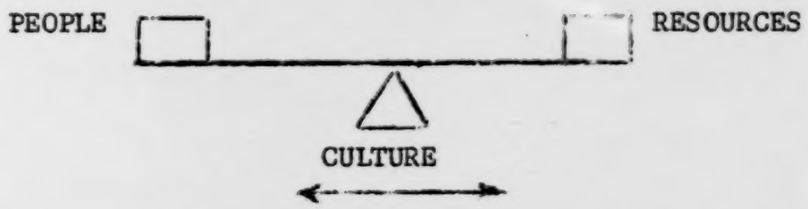
5. To insure through appropriate means that action ensues.

Until such time as a comprehensive plan for environmental education is formulated and adopted by the appropriate State authorities, the persons at this conference will assist in every possible way in the promotion and development of such a plan.

Subsequent sections of this environmental education proposal deal with the rationale, recommendations for action, and suggested components of such a state plan as envisioned by conference participants.

IDENTIFICATION OF THE PROBLEM

An environmental problem is perhaps best described as an interaction among man, his culture, and his surroundings that produces unhealthy or degraded conditions. This interaction may be diagrammed as follows:



CULTURE must be so located between PEOPLE and RESOURCES to result in a balance between PEOPLE and RESOURCES. If there are too many PEOPLE and not enough RESOURCES, the PEOPLE will tumble to disaster - unless CULTURE is modified. With the same number of PEOPLE, a sharp reduction in RESOURCES, and no change in CULTURE, the result would likewise be fatal. With continued growth in PEOPLE, a reasonable balance may be maintained only by shifting CULTURE or increasing RESOURCES. In many cases RESOURCES cannot be increased, hence, if CULTURE cannot adapt, the result, again, is fatal.

The pervasive problem, then, is how to strive toward a balance among PEOPLE, their life-styles (CULTURE), and the RESOURCES available. Possible alternatives include controlling the number, quality, and/or distribution of the PEOPLE; seeking new resources; adapting culture, perhaps by appropriately adjusting values and consumption;

or using any combination of the above. Further examination of the problems of PEOPLE, CULTURE, and RESOURCES will be necessary.

People-Based Problems

People-based problems relate to quantity and quality, or both. Quantity-of-people problems were generally unknown until recently. The environment always recovered from small insults. But today these insults are so extensive and come with such rapidity that degradation is severe and recovery is most difficult. The mere quantity of people in Illinois and world-wide results in situations never experienced in the past.

The "quality" of people -- their attitudes, values, ethics, and technology -- almost always affects the quantity. If people have negative attitudes about birth control, for example, there will eventually be a quantity-of-people problem.

Many citizens lack the attitudes, experiences and information to enable them to make the necessary decisions in their own homes, communities, and at the polls.

Educational experiences are needed to provide people with healthy attitudes toward their surroundings and technology. Unfortunately, there is questionable existence of (a) the kinds of education needed to change unhealthy attitudes to healthy ones, and (b) the evaluative procedures needed to identify which kinds of experiences are the most

productive of healthy environmental attitudes. Significant gaps in our knowledge limit judgments needed to initiate programs to change attitudes.

Furthermore, citizens with healthy attitudes toward the environment often do not know how to be influential. They often confuse short-range and long-range goals with respect to (a) the roles of the various professional and lay groups; (b) the roles of various governmental units; and, (c) the kinds of choices that they must make as consumers. Part of this confusion results from a lack of coordinated efforts which bring public attitudes into line with natural law. As is often stated, "People, and their representatives, who are not part of the solution, are a part of the problem."

Culturally-Based Problems

Culture is that complex whole which includes ecological, social, political, economic, religious, and educational systems. These many complex parts all interact with one another.

Existing cultural institutions seem able to cope only with fragments of environmental problems rather than with problems as a whole and seem ineffective in gathering knowledge and coordinating efforts to maintain or improve environmental quality. Most significantly, cultural priorities are often such that man tends to focus upon status-quo or short-range programs, perhaps of questionable value

in the long-term building and preservation of a democracy. Obviously the quality of all life and environment is basic to democratic and ecologically sound life-styles.

A drastic reduction must be made in the period of time required for institutions to adapt to changed conditions. This time lag leaves a gap between what we know must be done, what we say we are going to do, and what we actually do. Intentions often do not match actions. Solutions to critical problems are often caught in organizational and bureaucratic rivalries.

Significant parts of major religions are man-and-environment as well as man-to-man and inner-man relationships; therefore, religious leaders also play a major role in environmental attitude development.

Formal educational institutions generally have failed to develop the structure and programs needed to produce environmentally literate and active citizens or to initiate needed environmental research. Many continue to skirt or avoid real-life problems, controversial issues, cross-departmental programs, critical evaluation and educational reform. In Illinois there are not yet enough environmental study centers or in-service teacher education programs in environmental education to affect sufficiently children who will soon make decisions as consumers. Many teachers and administrators experience difficulty in utilizing problem-solving techniques while others continue to use inadequate and sterile lecture-discussion approaches. In a large sense,

many teachers and institutions lack sufficient sensitivity to adapt to the changes taking place in the world.

Resource-Based Problems

In the resources area we lack sufficient knowledge about the significance of many ecological systems. Research on such systems must be greatly increased. To date, we have found satisfactory ways to recycle only a few of our needed environmental supplies. Some resources can be reused or recycled over and over. Some are renewable but others become "extinct" once the supply is depleted.

In recent years the environment has been improved in many ways, but in other respects marked degradation has occurred. The projection, unless major reversals occur, is toward further degradation and depletion due to a combination of increased population and increased consumption on the part of each person. If the downward trend continues, the point will soon be reached at which life support-systems can no longer sustain us. Man as a species will then be endangered.

The Great Lakes Basin and the Mississippi watershed are but households of "spaceship earth." Much of the responsibility for maintaining these households is in the hands of the citizens of Illinois. If citizens are to carry out their responsibilities properly, we much quickly develop ever-sensitive critera for measuring the quality of our stewardship and communicate to all citizens the needed corrective and preventive actions.

Lack of Significant Action

Intentions do not bring about environmental quality; only significant action does. There has not been sufficient effective action to provide the know-how and motivation to solve the problems that PEOPLE have with RESOURCES through their CULTURE. A necessary focal point has been lacking from which state-wide action can flow. The solutions to many of our current environmental problems rest in our ability to do what we know must be done.

GOALS AND CHALLENGES OF ENVIRONMENTAL EDUCATION

What Is Environmental Education?

Environmental education is the process of recognizing and clarifying the values, attitudes, concepts, and skills necessary to understand and appreciate the interrelatedness among man, his culture, and his biophysical environment. Environmental education also entails practice in decision-making, problem-solving, community services and the acceptance of personal responsibilities pertaining to issues concerning environmental quality. This viewpoint is consistent with the definition used in the Environmental Education Act, P.L. 91-516:

> Environmental Education is the educational process dealing with man's relationship with his natural and man-made surroundings, and includes the relation of population, resource allocation and depletion, conservation, transportation, technology, and urban and rural planning to the total human environment.

Environmental education goes beyond "conservation education" or "outdoor education," which, in their current emphases and practices, appear too narrow to accomplish needed behavioral changes. Environmental education occurs not only in schools and universities but also in non-formal true to life situations.

Non-formal environmental education takes place in such components as adult and youth organizations, professional associations, corporations, research centers, unions, homes, farms, park and recreation departments, nature centers,

arboreta, community service centers, community-school centers, churches, scenic and recreational rivers, wild lands, scientific "natural" areas, museums, aquariums, and governmental bodies, and through mass media.

The Goals of Environmental Education

Environmental education is aimed at producing environmentally literate citizens in Illinois who:

(1) are knowledgeable about the biophysical environment and its associated socio-economic problems,

(2) are aware and concerned about how to meet these problems,

(3) are committed to personal preparation for solving them, and

(4) are motivated to work toward their mitigation or solution.

Each educational component should further refine these goals into the behavioral outcomes appropriate to specific populations with each citizen openly reflecting awareness and the realization that in most parts of the world man and his activities have become significant environmental forces.

Responsibility and Accountability for the Achievement of Goals

Environmental education is a primary responsibility of government and differs from many governmental functions in that it is directed toward the goals of society -- the sustaining and upgrading of a quality life -- rather than short-range needs. Since responsible government adjusts its

priorities to focus upon the most significant concerns of a society and since education is an important means of modifying behavior, government clearly must set high priority on environmental education.

Accountability for insuring action in achieving environmental education goals rests with the Executive, the Legislative and the Judicial branches of government. Funding responsibility rests with all levels of government. Government and the mass media must be held accountable not only for their influence, but also for their lack of influence upon each state citizen.

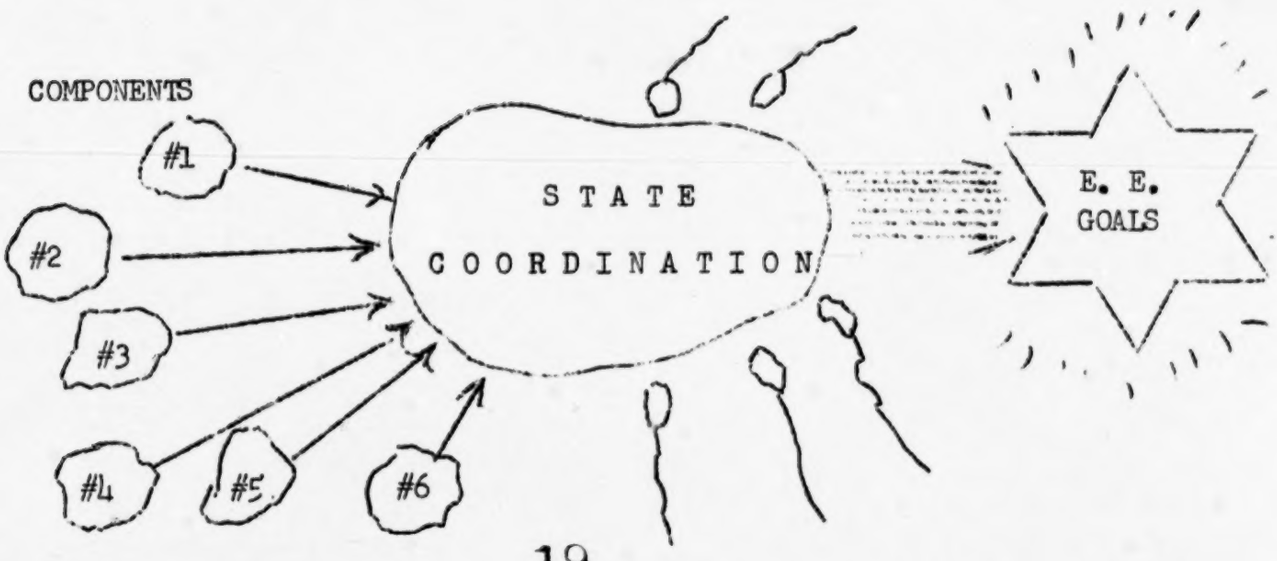
EXEMPLARY COMPONENTS OF A STATE STRATEGY

All components of Illinois life have obligations for environmental quality; they should, therefore, be involved in the development of a State master plan for environmental education.

The following are exemplary components appearing to have major responsibilities for environmental education:

State Governments	Federal and Regional Governments
School Districts	Citizen Organizations
Colleges and Universities	Individual Citizens
Professional Associations	Independent Education Organizations
Businesses and Industries	Mass Communications
Local Governments	

Each component has one or more major objectives and responsibilities under the umbrella of environmental education goals. Some of these objectives are set forth in the sections that follow. The extent to which any of these objectives can be met will be determined by the degree to which various constraints are overcome. Some strategies to overcome or ameliorate these constraints and to permit the attainment of component objectives are also listed.



COMPONENT I - STATE GOVERNMENTS

Objectives

1. To make publications and releases of state agencies consistent and in accord with the best known advances in environmental quality research.

2. To make state governmental publications on environmental topics readily available for reference and public dissemination.

3. To assemble and make available materials at a central data bank consisting of (a) significant environmental information and records of environmental conditions, (b) environmental activities by state agencies, and (c) status of pollution complaints, polluters, and action taken.

4. To stimulate programs of environmental education in all components in the State and coordinate efforts.

Constraints

1. Inefficient and bureaucratic entanglements tend to resist coordinated action.

2. Departmental sovereignties work at cross purposes.

3. Appropriate intergovernmental or interdepartmental agencies concerned with environment are lacking.

4. There is a lack of environmental literacy or attitudes on the part of government employees and officials.

5. Many obsolete laws and policies remain in effect.

6. The inertia of state politics.

Strategies

1. Establish a state board to review public information publications of state agencies for consistency and obsolescence on environmental concepts.

2. Establish an intergovernment review board in the Office of the Governor to review policies of various agencies as they relate to both formal and non-formal education. This should be an

autonomous board, appointment to which should be environmental expertise rather than political patronage.

3. Review the policies of governmental agencies and departments for consistency with environmental or ecological principles and with each other.

4. Initiate major programs of inservice training for education of enforcement and management personnel who deal with environmental problems and state resources.

5. Emphasize environmental quality and environmental education in the informational programs of state agencies.

6. Give Environmental Protection Agency or another appropriate agency authority and responsibility for developing means for prompt routing of environmental complaints to proper agencies for action.

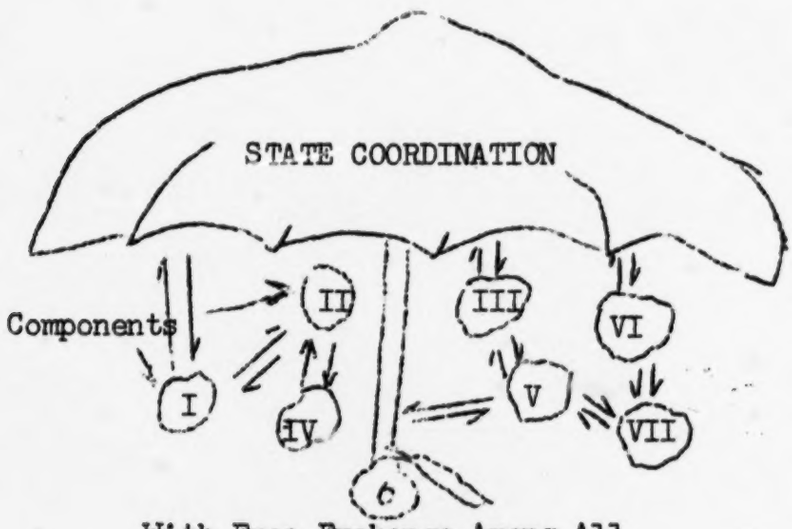
7. Take steps, through legislative action, to insure that appropriate clauses relative to environmental education are included in state contracts and that means are provided for proper monitoring of these conditions.

8. Review, revise or eliminate any obsolete laws and policies restricting environmental education and reforms.

9. Publicize needs.

10. Increase sensitivity to public pressures.

11. Take all steps necessary to implement the State Plan.of Environmental Education.



COMPONENT II - SCHOOL DISTRICTS

Objectives

1. To develop student, faculty, administrator, and community identification with the environmental crises.

2. To develop environmental literacy on the part of students and the public.

Constraints

1. The traditional school organization (departmentalization and the fixed time schedule, etc.) does not provide sufficient flexibility for inter-disciplinary environmental education instruction.

2. Community and school attitudes inhibit student and faculty freedom in departing from traditional curricula. Institutional rigidity and traditional content-oriented, teaching styles prevent inter-disciplinary, problem-oriented. approaches to environmental education.

3. Up-to-date and effective instructional materials and inservice opportunities for teachers are often unavailable.

4. There is a lack of commitment to environmental action on the part of various formal and non-formal educational agencies.

5. Laws relating to teacher and school liability discourage active involvement of children in direct confrontation with environments of the community.

6. Accrediting agencies and college admission offices are inflexible in recognizing non-traditional courses of study or approaches.

7. Preservice teacher education programs are often content-oriented, forcing teachers to specialize in departmental instruction.

8. Few schools have given priority to environmental literacy in their philosophy, in curriculum development, in staff selection, or in budgeting.

9. School personnel are inadequately prepared for environmental education and often are unreceptive.

Strategies

A complete reform in our present formal educational system appears needed. Impetus and leadership should come from the Office of the Superintendent of Public Instruction for this reform that would include:

1. School programs that relate positively to local, national, andglobal environmental problems.

2. School programs that are problem-oriented rather than discipline-oriented.

3. Inservice teacher education programs providing experimental learning environments that stress the "process" of teaching and learning as well as the content.

4. Individualized learning environments for children which utilize areas and expertise outside the classroom, e.g, business offices, industrial plants, parks, museums, and facilities of local and state agencies, with the school serving as the coordinating center.

5. Opportunities for integration, continuity, flexibility, openness, feedback, experimentation, and acceptance of change.

6. An acceptance of accountability for its product: balanced and informed citizens who are capable of functioning effectively in society and in harmony with the environment.

7. School districts, individually and collectively, accepting responsibilities in the non-formal aspects of environmental education.

8. The identification and utilization of private and public natural resources available to the school systems.

9. School districts jointly acquiring and developing environmental study areas (outdoor laboratories).

10. School districts developing massive inservice programs focusing on environmental literacy.

11. School districts cooperating with various professional, interpretative, and non-formal educational organizations and county or area environmental education councils.

COMPONENT III - COLLEGES AND UNIVERSITIES

Objectives

1. To develop, within students, faculty, administration, staff and the general public, identification with environmental crises.

2. To adequately train persons for needed expertise applicable to the alleviation of environmental stress.

3. To assist in the solution of environmental problems, per se, and environmental educational problems.

4. To acquire, analyze, store, disseminate, and translate environmental education information and data about the environment.

5. To prepare personnel to conduct environmental education programs in schools and in non-formal situations through problem-solving techniques.

Constraints

1. Mechanisms and direction are lacking whereby higher education can provide input for state decision making concerning priorities on environmental problems.

2. Coordination and cooperation between and among colleges and universities and the Office of the Superintendent of Public Instruction within the state is lacking.

3. Finances with which to undertake new programs or redirect old ones are inadequate.

4. Personnel trained to deal with environmental problems and their solution are in short supply.

5. There is great variety in the ecosystem stresses in Illinois -- the Chicago urban environment -- much agricultural use -- insufficient recreational resources.

6. There is much inflexibility on the part of existing people, programs, curricula; and far too many little kingdoms involved.

7. Unfamiliarity in performing service roles, a reluctance to take on service responsibilities, and a reluctance to be held accountable.

Strategies

1. Develop programs and courses (required of all students beginning at the freshman level) in interdisciplinary environmental studies at all colleges and universities.

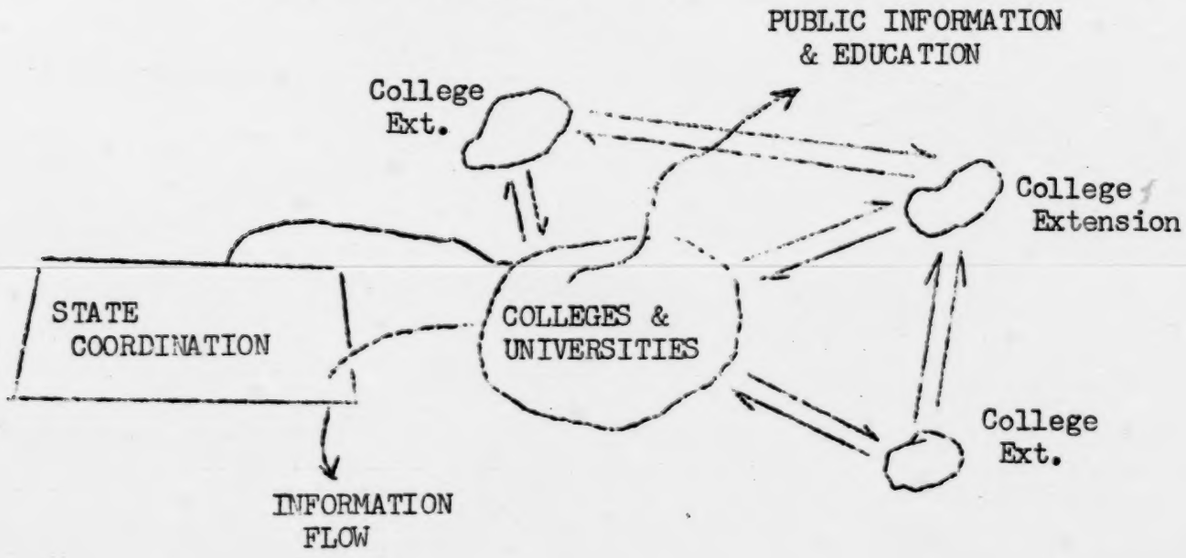
2. Develop inter-institutional, cooperative programs at both the undergraduate and graduate levels for majors in environmental studies.

3. Develop a Higher Education Environmental Education Advisory Council (perhaps initiated by the Board of Higher Education) to deal with various constraints and to coordinate environmental education efforts in community colleges, colleges and universities.

4. Acceptance of the responsibility for the goals of environmental education by each institution, college, department, school, etc. with an accompanying increase in the priority given them by each.

5. Develop environmental study centers for year-round environmental education at various institutions (perhaps through inter-university cooperation and through cooperation with other agencies such as National Accelerator Laboratory, Morton Arboretum, or Environmental Protection Agency).

6. Develop college community extension and service centers to promote higher education extension in environmental studies.



COMPONENT IV - PROFESSIONAL ASSOCIATIONS (Organizations serving interests and needs of individuals arising from professional, occupational or vocational activity)

Objectives

1. To alert and inform professional and labor association membership and the public about environmental problems, quality, and needs.

2. To take positions on environmental issues, provide financial support (where not constrained by charter or law), assert these positions to the public and governmental bodies and encourage individual members to take similar positions.

Constraints

1. These organizations have diverse and vested professional interests.

2. There is lack of coordination and efficient communication among these organizations.

3. Many associations lack sufficient funds, staff and permanent offices.

4. Restrictions are imposed by legislation, by-laws, constitutions and charters.

5. Various membership factions regard the purposes of the organizations to be related only to occupational interests; hence, object to giving priority to "non-occupational" concerns.

Strategies

1. Concerned members of these associations should (a) assume leadership roles, (b) be assertive regarding environmental education programs, and (c) insist that they be given priority.

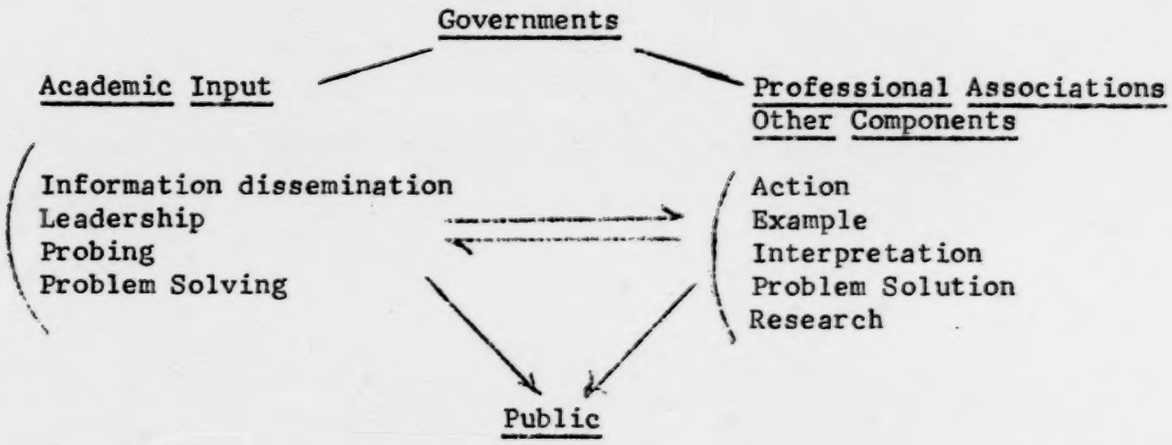
2. Constraints imposed by law, charter, constitution, etc. should be removed or liberalized.

3. Funds should be included within the financial structure of these organizations to enable them to undertake active environmental education programs.

4. Development of cooperative environmental education programs between the professional associations and agencies with legislative mandates relative to environmental quality.

5. Formation of coordinating councils and consortia to promote and coordinate environmental education efforts within these organizations.

6. Individuals or task forces should be designated within each association to conduct active programs of environmental education, to coordinate such efforts within the organization, and to work with other agencies and citizens



COMPONENT V - BUSINESSES AND INDUSTRIES

Objectives

1. Through "formal" and "non-formal" education, increase awareness of the contributions and problems of business and industry that relate to environmental quality and the associated socio-economic conditions.

2. To educate the general public as to sacrifices they must incur if we are to achieve environmental quality standards.

3. To identify and inform the citizen of his role in helping business and industry to achieve environmental quality standards.

4. To recommend environmental quality standards based on total collective effect and long-range implications rather than on short-range attempts at public pacification.

5. To communicate that modern industry goals are not totally profit oriented.

6. To inform consumers of their responsibility in the proper use of products.

Constraints

1. There is a lack of environmental competence necessary to establish inter- and extra-corporate ecological awareness and understanding.

2. There is a lack of (a) time, (b) money, (3) space to resolve problems.

3. The public generally lacks understanding as to business and industry's labor and economic problems.

4. There is much concern about the impact on communities and citizens if laws or regulations precede technology.

5. The public has a misconception that business and industry are non-human entities.

6. The public has a misconception of business and industry's goals.

Strategies

1. Inform major Illinois businesses and industries of the outcomes of this conference.

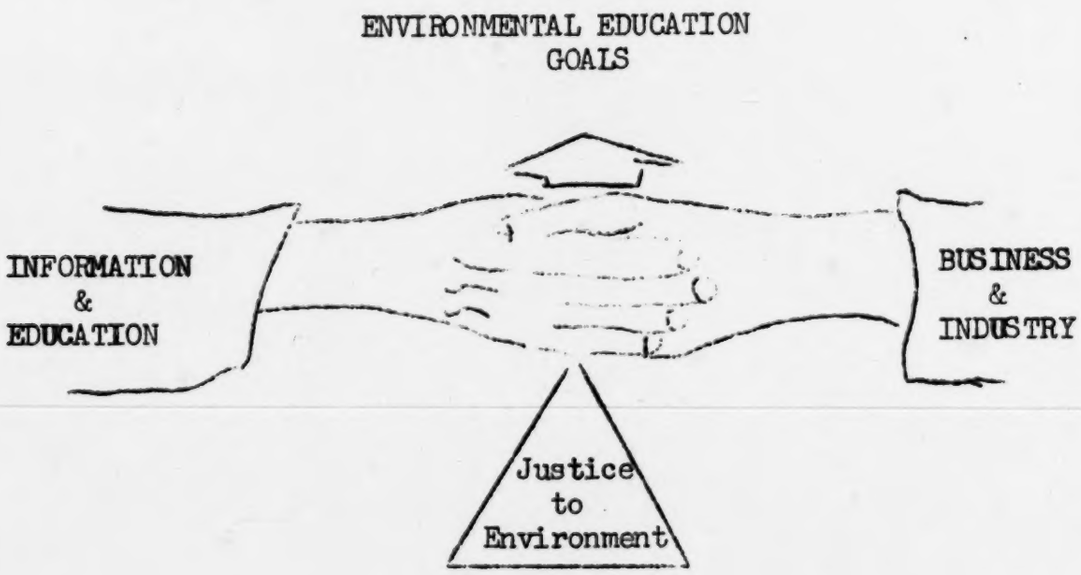
2. Develop time schedules to accomplish the objectives and alleviation of the contraints.

3. Prepare and exchange information about the evolution of the pollution control technology so as to minimize research time.

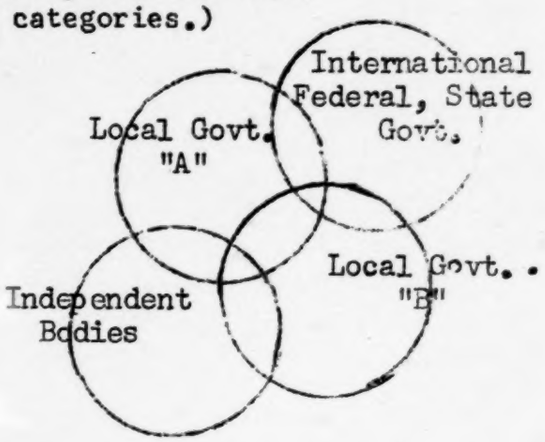
4. Work closely with "formal" and "non-formal" educational components to develop instructional packets and materials.

5. Local, district, and state organized business and industry groups act as clearing houses for information dissemination.

6. Businesses to encourage interchange of ideas through public and school visitations of plants, facilities, and activities.



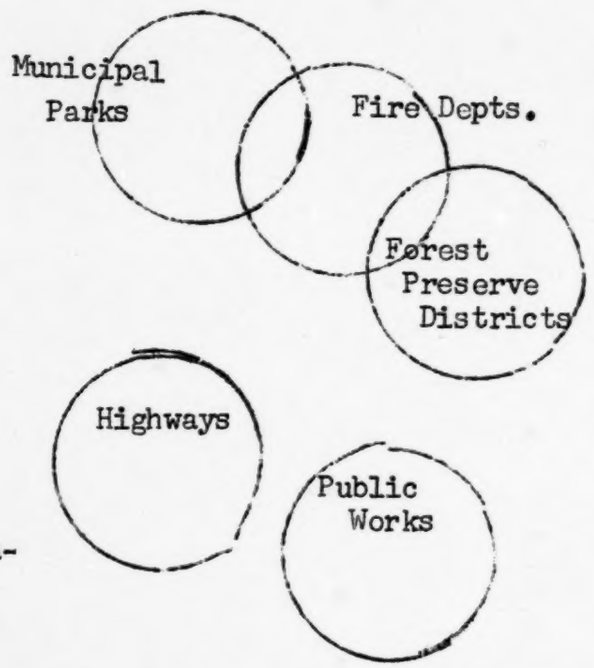
COMPONENT VI - LOCAL GOVERNMENT (The one or more arms of officially constituted authority and public service that lie below the level of state categories.)



Objectives

1. To lead in helping citizens to know the necessity for wholesome surroundings and to find the means to attain them.

2. To integrate its efforts with those of cooperating sister agencies, with other levels of government, and with relevant independent bodies.



Constraints

1. Local government often contains poorly meshing or competing parts which often overlap into confusion and duplication.

2. Local governmental bodies often isolate themselves from cooperative programs with other political or independent bodies.

3. Many governmental officials lack attitudes, information and understanding of environmental matters and, hence, cannot act appropriately in environmental matters.

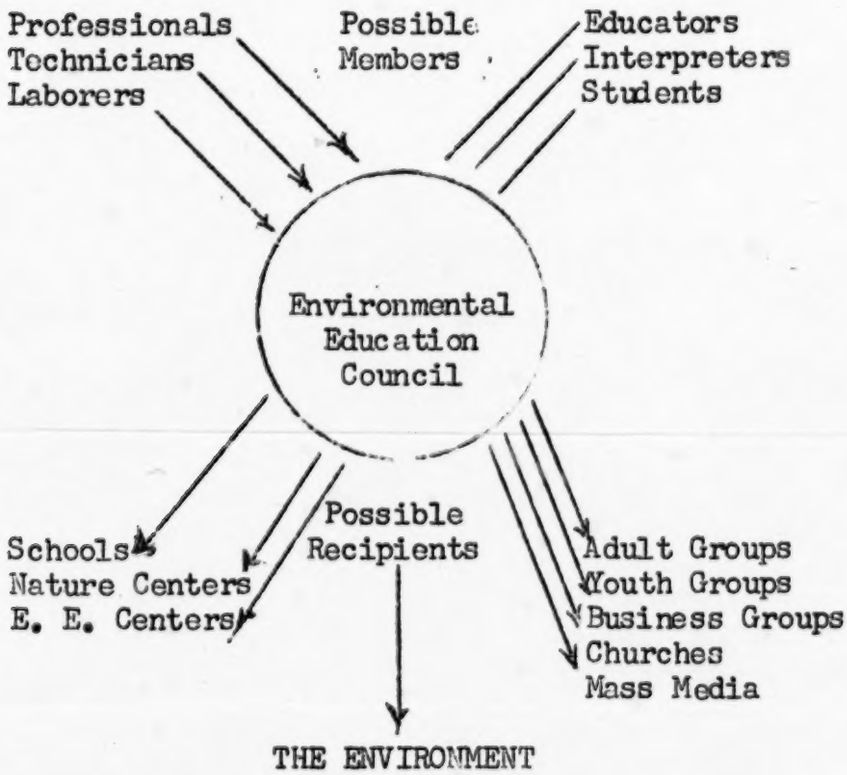
Strategies

1. Become free forums in which bodies, politic and independent, build a government dedicated to environmental quality. Participation and cooperation by a citizenry permanently motivated by capable politicians, professional educators and trained interpreters are needed.

2. Weld an effective team at all levels of constituted authority, public service, and relevant independent bodies. Every appropriate program, facility and expertise should be marshaled and utilized in environmental education.

3. Create environmental quality and environmental education emphases in groups such as the Illinois Municipal League, Illinois Parks Association, etc. The agencies should provide consultant services to assist local units.

4. Establish permanent local or county environmental education councils (perhaps at the initiation and under the direction of local governmental agencies). The councils would promote, coordinate and support local environmental education undertakings and offer information, guidance, policy, and reinforcement. Membership would include concerned government and private units at all levels of responsibility and expertise. Councils would work closely with any environmental education center that might be staffed by higher government agencies, e.g.:



COMPONENT VII - FEDERAL AND REGIONAL GOVERNMENT

Objectives

1. For the U. S. Office of Education to recommend a variety of programs and assist in coordinating efforts in environmental education. The President may direct agencies to work together and the Office of Education has been given the responsibility under the Environmental Education Act of 1970 to recommend such coordination.

2. For the Regional Office of the U. S. Office of Education to recommend priorities and programs in state environmental education plans and give technical assistance for their implementation.

3. For such agencies as Environmental Protection Agency, Department of Agriculture, Interior Department, etc. to accept major responsibilities and to provide resources for "formal" as well as "non-formal" education in environmental matters.

4. For federal and regional governmental personnel to be informed and educated about ecological problems, environmental quality, and environmental interpretation and education through a central office such as the new office of environmental education in the U. S. Office of Education.

Constraints

1. There is great difficulty in coordinating the diverse programs of existing agencies. It is clear that this coordination cannot be implemented without direct intervention by the President at the cabinet level.

2. It is unclear as to what (a) is available, (b) has been done, (c) is being done, or (d) is needed.

3. The new office of environmental education called for in Environmental Education Act of 1970 has not been implemented or funded.

Strategies

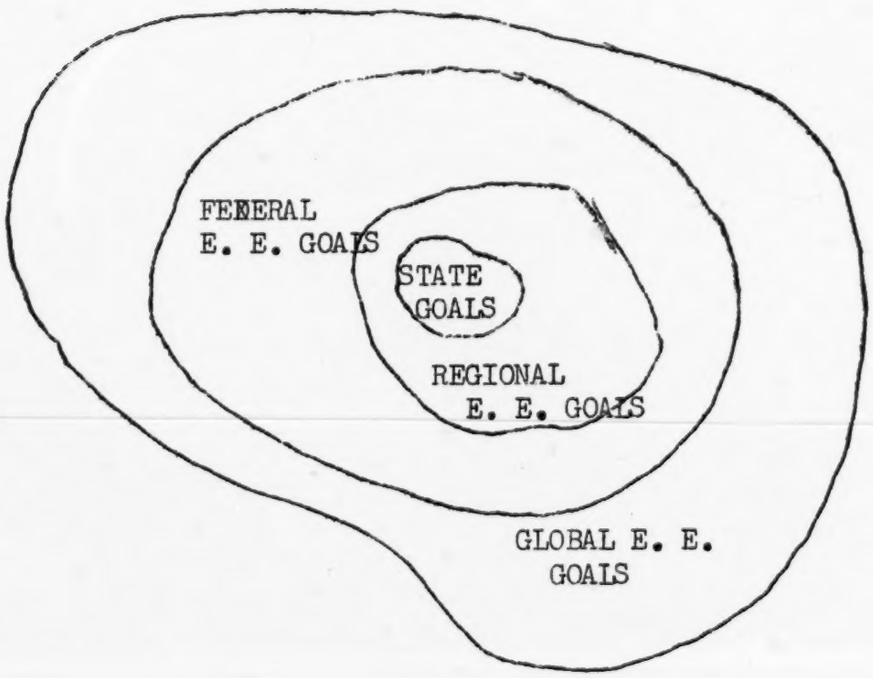
1. The Environmental Education Act should be implemented and fully and adequately funded. People in the State should demand that funds be allocated and that additional funding be sought for a more comprehensive and continuing program.

2. Seek face-to-face confrontations with Congressmen. Go to Washington and obtain commitments.

3. Develop regional exchange of information either on an ad hoc or permanent basis (perhaps through an appropriate Federal agency or individuals. Disseminate information to the public through mass media, newsletters and other means.)

4. Utilize all authority and every means available to stimulate States to implement comprehensive state plans for environmental education. Call upon Governors and Legislatures to charge Task Forces with the responsibility for (a) surveying problems and resources, (b) cataloging current programs, (c) setting priorities, (d) developing permanent staffs to extend the work of the Task Forces, (e) developing environmental study centers, (f) seeking federal grants and funds, and (g) working for needed legislation.

CONSISTENCY AMONG ENVIRONMENTAL EDUCATION GOALS



COMPONENT VIII - CITIZEN'S ORGANIZATIONS (Garden Clubs, League of Women Voters, Illinois Wildlife Federation, YMCA, Audubon, Boy and Girl Scouts, resource councils, environmental action and consumer groups, etc.)

Objectives

1. To develop an informed and alert membership that is able, willing and prepared to communicate on environmental quality issues to various groups, citizens, mass media, etc.

2. To inform the public on all levels (local, state and regional) about environmental situations.

3. To exert appropriate pressure promoting environmental education.

4. To stimulate individuals and groups to action.

5. To assist educational vehicles, agencies and centers to identify and train resource personnel.

Constraints

1. Funds are often lacking for effective programs.

2. Local groups often lack qualified personnel because o of the non-paid nature of staffs. A duplication of activities and a lack of communication between various groups often results.

3. There is a lack of professional leadership from other levels (state, county, regional) to work with citizen's groups.

4. There is a conflict of interest and priorities within and among organizations.

Strategies

1. Participate in the establishment of councils on a county, regional, and state level.

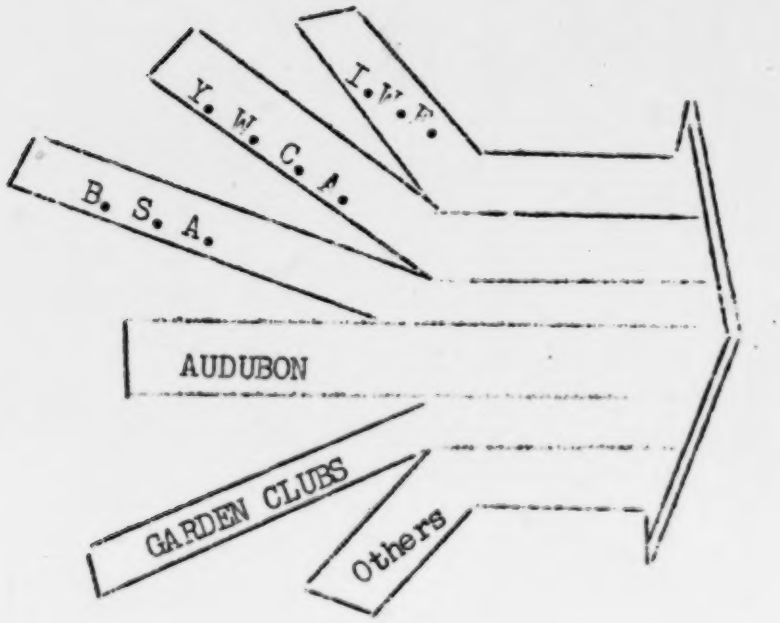
2. Sponsor workshops, conferences and other meetings to provide opportunities for various disciplines (inter- and intra-agency) to exchange information, obtain training, and ideas.

3. Develop a master plan for environmental education within each organization (consistent with state

or regional plans) to ameliorate constraints and to attain objectives. Tailor to local needs, interests, responsibilities, funds, etc.

4. Assist in the development and implementation of volunteer consultant task forces to work with various educational agencies, schools, adult groups, mass media, etc.

5. Assume leadership for developing a strong environmental quality lobby useful at various levels of government.



COMPONENT IX - INDIVIDUAL CITIZENS

Objectives

1. To educate one's self in environmental matters, particularly in areas applicable to the immediate environment.

2. To become involved financially, morally, intellectually and emotionally in environmental issues and situations.

3. To infect others with the ethic of stewardship, and thus encourage environmental literacy and activism.

4. To individually promote environmental education.

Constraints

1. The individual citizen is apt to be ineffective in environmental education because he is (a) more subject to apathy - what can one man do? - and (b) limited by his personal resources such as time, money, and particularly, information.

Strategies

1. Encourage the establishment of environmental information or study centers.

2. Pressure school administrators to provide children with instruction in environmental matters.

3. Join with other citizens in supporting and promoting environmental education.

4. Speak out in favor of new laws and regulations facilitating environmental education. Become a habitual letter writer (if personal contact and telephoning are not practicable).

5. Become a one-man source of environmental information directed towards family, mass media, friends, and anyone who will listen.

COMPONENT X - INDEPENDENT EDUCATION ORGANIZATIONS
(Open Lands Project, Morton Arboretum, Brookfield Zoo, Nature Conservancy, consultant firms, private centers and institutes, foundations, museums, etc.)

Objectives

1. To promote environmental education in the context of the unique resources available to members of these groups.

2. To supplement and support the environmental education efforts of more formal groups.

3. To cooperate with and coordinate environmental educational efforts with those of local schools and other concerned agencies.

Constraints

1. Generally, these groups lack tax-derived financial support.

2. Being a part of no confederation or state-wide system, there is a dearth of inter-communication among these groups.

3. Staff and physical resources are generally limited.

4. The environmental education efforts of these groups may be constrained by losses of land and other resources to those who nibble at any "undeveloped" acres.

Strategies

1. Assess resources for environmental education and maintain an open-inventory.

2. Establish staff positions in environmental education.

3. Set up and actively support systems for environmental education information exchange among independent environmental education groups. This should be plugged into other information systems.

4. Seek foundation and governmental support for environmental education.

5. Enlarge audiences, particularly age-wise, ethnically and geographically to the greatest practicable extent.

6. Seek enthusiastic volunteer helpers.

COMPONENT XI - MASS COMMUNICATIONS

Objectives

1. To focus mass informational and educational efforts primarily upon the "causes" of environmental problems as opposed to the "symptoms."

2. To establish optimal efficiency in the utilization of public and private communications' expertise.

3. To focus attention upon sound long-range ecological issues as opposed to short-range sensationalized events.

Constraints

1. Poor communications exist between the mass media and the State's other components.

2. There is inadequate financial funding directed toward environmental issues.

3. The short-range desires of society are not consistent with long-range ecological goals.

4. There is a lack of expertise in mass media to comprehend and interpret environmental problems.

Strategies

1. Research, develop, and initiate informational and educational strategy consistent and coordinated with the State Plan.

2. Develop and submit communication program proposals for funding to appropriate private and governmental agencies.

3. Employ professionals trained in ecology and environmental education.

4. Establish inter-media environmental information and education consultant commissions.

5. Establish preservice and inservice training for writers and commentators.

COMPONENTS - SUMMARY

This section contains eleven selected exemplary components of a master plan for environmental education. In dealing with these components, it must be recalled that there is sometimes a hairline difference between an agency or institute that deals primarily with "environmental control" and an agency or institute that focuses upon "environmental education."

"Environmental control" agencies are oriented towards the creation of events that directly (1) reduce the impairment, (2) maintain the current level of quality, or (3) enhance the environment. In contrast, "environmental education" agencies focus upon the people -- their attitudes, values, behaviors, etc. -- and their life-styles that produce the environmental problems in the first place. Thus, a "control agency" is concerned primarily with the conditions of the environment whereas the "education agency" is concerned with the people who in turn affect the environment. Obviously, however, control agencies may have educational components, and educational agencies will be dependent upon control agencies particularly for technical information. They must operate in concert.

The message of this proposal for a master plan for environmental education rests upon the premise that there are various state components having environmental education responsibilities. These components, which infinitely

overlap and interface other components, must be so orchestrated at the state level that they are not competitive and, instead, are supplementary and complementary.

Each component should develop in detail a strategy for environmental education consistent with its own goals. Each strategy, moreover, must be consistent with the state master strategy. Only when problems are viewed comprehensively and dealt with in detail are solutions found that remain significant over time.

CONFERENCE RECOMMENDATIONS

RECOMMENDATION I

The appropriate state authority establish a trans-disciplinary task force representative of all state agencies, private organizations, and interested groups to develop a master plan for environmental education for Illinois.

Furthermore, this task force be established as soon as possible; be provided with sufficient monies to properly and expeditiously complete the development of a detailed and comprehensive plan; and work on a continuing basis through a permanent staff to develop, implement, and evaluate the plan.

RECOMMENDATION II

Primary emphasis of any plan for environmental education be placed not only on the cognitive or information domain, but also on the emotional or affective domain of educational outcomes.

Reasonable men have been presented with reasonable information and they appear to have not been moved to act. The time has come to appeal to the emotional side of man. He should be encouraged to activity by the most expeditious means available consistent with a reasonable degree of individual freedom.

RECOMMENDATION III

That an organization comparable to the national Environmental Defense Fund be established in Illinois.

The rationale for establishing such an organization is based upon these concepts (a) many components of the environment continue to be degraded, (b) there are distinct mandates at both the state and national levels to afford individual citizens the right to a clean environment, and (c) individuals lack the knowledge, time, funds, and expertise to secure the necessary legal assistance or to pursue necessary courses of action.

This organization would (a) utilize existing legislation and work to effect new legislation to insure prompt and effective prosecution of violators, and (b) marshal competent attorneys to aid in litigation and in formulation of proposed legislation.

Activities of this organization would include (a) raising operating funds, (b) screening complaints for frivolity, (c) selecting cases to pursue based on precedent value or magnitude of ecological ramifications, and (d) coordinating efforts with agencies at various levels.

RECOMMENDATION IV

The State of Illinois encourage Congress to fully fund the Environmental Education Act of 1970 and to release for use any funds already appropriated.

RECOMMENDATION V

Until such time that a master plan for environmental education is developed, agencies with an interest or mandate regarding environmental education increase emphasis on such programs and on the study y of problems of environmental quality. We recommend

a. a substantially greater effort than at present be made within the State Department of Public Instruction to increase the emphasis given to environmental education in the schools,

b. the Board of Higher Education give maximum attention to environmental studies at the institutions of higher learning, such as through the establishment of several centers for the study of environmental problems, and

c. Federal, State, and private agencies with educational programs to optimize environmental quality in their programs.

CONCLUSIONS

This proposal has dealt with the (a) rationale for a State master plan for environmental education, (b) identification of environmentally related problems, (c) goals of environmental education, and (d) development of a strategy to achieve these goals.

The rationale for a State master plan is predicated upon the magnitude of certain problems unique to this period of history -- exploding human population, rapid resource consumption, and cultural maladaptiveness. Many current life-styles are such as to place man on the biological critical list from sheer ignorance and the failure to recognize that man cannot set himself apart from nature.

Environmental education is truly a global attempt to re-orient and "reform" man's value systems and life-styles to be more consistent with natural ecological principles. Environmental education is not a "warming over" of earlier efforts. It is different in that it is urban-oriented, focused upon new problems, action-based, trans-disciplinary and has survival import. Because of its uniqueness, breadth, and relevance, environmental education must be coordinated at the highest levels. The State must develop the necessary machinery to insure that a maximum and continued effort is made.

This proposal offers preliminary efforts for various identifiable components of the State to use to initiate and

activate their strategies. State-level leadership and action is needed to provide direction and coordination.

The State cannot afford to ignore the significance of this proposal: the consequences in many cases are irrevocable and too dangerous. Although every citizen is a part of the problem, he is also potentially a part of the solution. Making every citizen a part of the solution can only be fully realized through a comprehensive State master plan for environmental education for the State of Illinois.